

Maryland Historical Trust

Maryland Inventory of Historic Properties Number: AL-V-B-317

Name: North Branch Bridge #1043

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST	
Eligibility Recommended _____	Eligibility Not Recommended <u>X</u>
Criteria: <u>  </u> A <u>  </u> B <u>  </u> C <u>  </u> D Considerations: <u>  </u> A <u>  </u> B <u>  </u> C <u>  </u> D <u>  </u> E <u>  </u> F <u>  </u> G <u>  </u> None	
Comments: _____	
Reviewer, OPS: <u>Anne E. Bruder</u>	Date: <u>3 April 2001</u>
Reviewer, NR Program: <u>Peter E. Kurtze</u>	Date: <u>3 April 2001</u>

MARYLAND INVENTORY OF HISTORIC PROPERTIES  
HISTORIC BRIDGE INVENTORY  
MARYLAND STATE HIGHWAY ADMINISTRATION  
MARYLAND HISTORICAL TRUST

MHT NO. AL-V-B-317

**NAME AND SHA NO.:** North Branch Bridge, 1043

**LOCATION**

**Road Name and Number:** MD 47 over North Branch

**City/Town:** Barrelville ☒ vicinity

**County:** Allegany

**Ownership:** ☒ State ☐ County ☐ Municipal ☐ Other

**Bridge projects over:** ☐ Road ☐ Railway ☒ Water ☐ Land

**Is bridge located within designated district?:** ☐ yes ☒ no  
☐ NR listed district ☐ NR determined eligible district  
☐ locally designated ☐ other  
Name of District

**BRIDGE TYPE**

☐ Timber Bridge  
☐ Beam Bridge ☐ Truss-Covered ☐ Trestle ☐ Timber-and-Concrete

☐ Stone Arch Bridge

☐ Metal Truss Bridge

☐ Moveable Bridge  
☐ Swing ☐ Bascule Single Leaf ☐ Bascule Multiple Leaf  
☐ Vertical Lift ☐ Retractable ☐ Pontoon

☐ Metal Girder  
☐ Rolled Beam ☐ Rolled Beam Concrete Encased  
☐ Plate Girder ☐ Plate Girder Concrete Encased

☐ Metal Suspension

☐ Metal Arch

☐ Metal Cantilever

☒ Concrete  
☐ Concrete Arch ☐ Concrete Slab ☒ Concrete Beam ☐ Rigid Frame  
☐ Other Type Name

## DESCRIPTION

### **Describe the Setting:**

Located in northwestern Allegany County, Bridge No. 1043 carries MD 47 over North Branch near the town of Barrelville. Part of Maryland's Appalachian Plateau physiographic zone, MD 47 crosses the generally easterly-flowing North Branch in a north-south direction.

### **Describe the Superstructure and Substructure: (Discuss points identified in Context Addendum, Section C)**

Consisting of two-22 foot (+/-) concrete continuous beam spans, Bridge No. 1043 carries two lanes of opposing traffic on its 24 feet (+/-) of clear roadway. Erected in 1923, the bridge measures 42 feet (+/-) in total length. The bridge has a 63 (+/-) degree skew. Four concrete T-beams spaced at 5'-9" (+/-) support the concrete deck with bituminous wearing surface, underhanging water pipe and small safety curbs. Traffic barrier W-beam guardrails extend across the structure from the approaches, replacing the original concrete balustrades and serving as bridge railings. The 3 foot (+/-) thick pier, abutments and wingwalls consist of rubble stone masonry gunited with concrete and have concrete overpours at the streamline. The bridge is founded on Calcareous Shale Rock.

A survey of historic concrete beam bridges undertaken by the Maryland State Highway Administration in the Fall of 1995 identified 113 bridges of that type located throughout the state. Nearly one-quarter (26) of that total were double-span bridges; 37 bridges (33%) were multiple span.

### **Discuss major alterations:**

In May, 1985 the northeast wingwall failed and was replaced with a gabion structure. At this time, the exterior girders were heavily spalled with exposed stirrups. In 1989 the deck was widened by 1'-2.5" (+/-) on each side to extend the cantilever by 8.5" (+/-). In 1991 the bridge was recommended for total replacement. In January, 1992 a five foot section of grout bags or sausages was placed under the pier to prevent undermining. At this time, the stone pier was also repointed, the exterior girders were repaired with pneumatically applied mortar, a drain was placed in a wingwall and a boulder was removed from the stream. In January, 1996 the pier collapsed, forcing a closure of the bridge. At this time, a temporary one lane jumper or Mabey bridge was erected across the span while a concrete replacement pier was erected. On April 16, 1996 numerous cracks and spalls were noticed on the girders and the exterior curbs were heavily deteriorated.

## HISTORY

**When Built:** 1923

**Why Built:** Unknown

**Who Built:** State Roads Commission

**Who Designed:** Unknown

**Why Altered:** Near complete deterioration and spalling of the concrete balustrades, lack of stability in northeast wingwall and collapse of pier.

**Was this bridge built as part of an organized bridge building campaign?:** No, historic research has not indicated that this bridge was erected as part of an organized building campaign.

## SURVEYOR ANALYSIS

**This bridge may have NR significance for association with:**

☐ A (Events) ☐ B (Person) ☐ C (Engineering/ Architectural Character)

**Was this bridge constructed in response to significant events in Maryland or local history?**

No. Documents have not identified any events significant in Maryland and/or local history that spurred construction of Bridge No. 1043. The improvement of the Allegany County road system resulted from events that occurred during the first three decades of the twentieth century. The rapid growth in vehicular usage during this period prompted the replacement of the existing older structures of the 19th century with newer modern structures which could handle the larger loads. Many times, though, existing stone substructures were retained with the usage of a new superstructure. During the 1920's, the State Roads Commission focused on the improvement of the primary road system with concerns for the highway users' safety and comfort while upgrading the secondary road system as well as the farm-to-farm network of feeder roads.

**When the bridge was built, and/or given a major alteration, did it have a significant impact on the growth and development of the area?**

Erection of Bridge No. 1043 does not appear to have had any significant impact on the area's growth and development.

**Is the bridge located in an area which may be eligible for historic designation, and would the bridge add or detract from the historic and visual character of the possible district?**

No, the bridge is not located in an area potentially eligible for historic designation.

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**MHT NO. AL-V-B-317**

**Is the bridge a significant example of its type?**

Bridge No. 1043 consists of two identical, 22 foot spans matching the 1924 standard plans for concrete girder bridges by the State Roads Commission, except for the retention of stone substructure units from a probable older structure at the same crossing. These standard plans included the use of concrete balustrades instead of parapets for railings. As a result of the insensitive replacement of the bridge's concrete balustrades, the widening of the superstructure and loss of the stone pier, Bridge No. 1043 is not a significant example of its type.

**Does the bridge retain integrity of the important elements described in the Context Addendum?**

The complete removal of the bridge's balustrade and its replacement with traffic barrier W-beam barriers has compromised the overall integrity of the structure. The remaining character defining elements do not possess good integrity with the loss of the pier and major revisions to the abutments.

**Is the bridge a significant example of the work of the manufacturer, designer, and/or engineer, and why?**

No. Bridge No. 1043 is not a significant example of the State Roads Commission's standard plans for concrete bridges.

**Should this bridge be given further study before significance analysis is made, and why?**

No, since the resource does not possess sufficient integrity.

**BIBLIOGRAPHY**

Maryland State Highway Administration

As-Built Drawings. On file at 707 North Calvert Street, Baltimore.

Bridge Inspection Reports. On file at 707 North Calvert Street, Baltimore.

**SURVEYOR INFORMATION**

**Name:** James T. Aguirre

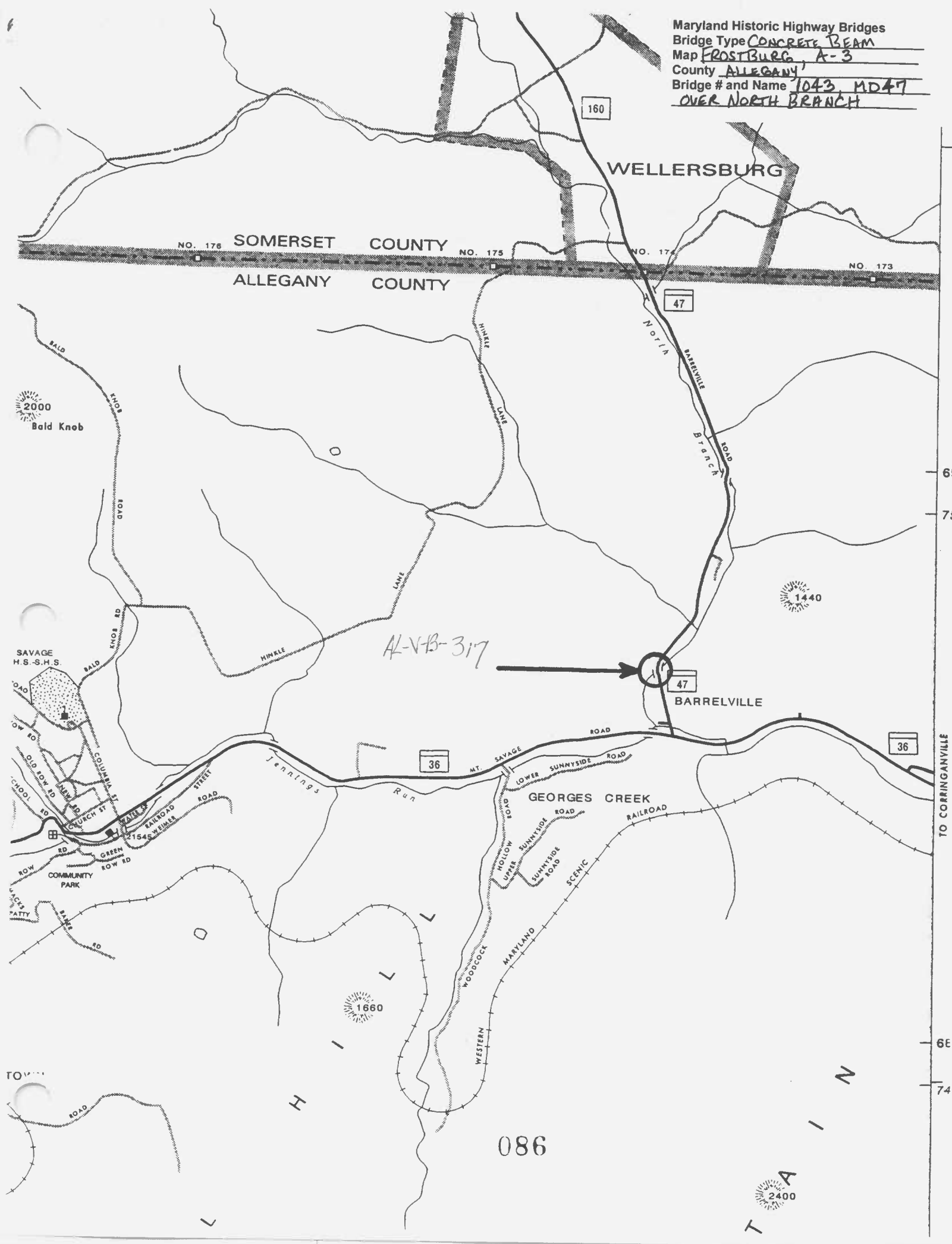
**Date:** July 17, 1996

**Organization:** Environmental Section, Project Planning Div.

**Telephone:** (410) 545-8559

**Address:** 707 North Calvert Street, Room 300  
Baltimore MD 21202

Maryland Historic Highway Bridges  
Bridge Type CONCRETE BEAM  
Map FROSTBURG, A-3  
County ALLEGANY  
Bridge # and Name 1043 MD47  
OVER NORTH BRANCH





AL-V-B-317

1043 MD 47 OVER NORTH BRANCH

ALLEGHENY CO., MD

C. HALL

8/98

MD SHPO

SOUTH APPROACH

1 OF 6





AL-V-B-317

1043 MD 47 OVER NORTH BRANCH

ALLEGHENY CO., MD

C. HALL

8/98

MD SHPD

NORTH APPROACH

2 OF 6



AL-V-B-317

1043 MD 417 OVER NORTH BRANCH

ALLEGHENY Co., MD

C. HALL

8/98

MD SHPO

EAST ELEVATION

3 OF 6



AL-V-B-317

1043 MD 47 OVER NORTH BRANCH

ALLEGHENY CO., MD

C. HALL

8/98

MD SHPO

WEST ELEVATION

4 OF 6



AL-V-B-317

1043 MD 47 OVER NORTH BRANCH

ALLEGHENY CO., MD

C. HALL

8/98

MD SHPO

WEST ELEVATION

5 OF 6





AL-V-B-317

1043 MD 47 OVER NORTH BRANCH

ALLEGHENY CO., MD

C. HALL

8/98

MD SHPO

EAST RAILING

6 OF 6

9200062

INDIVIDUAL PROPERTY/DISTRICT  
 MARYLAND HISTORICAL TRUST  
 INTERNAL NR-ELIGIBILITY REVIEW FORM

Property/District Name: Bridge #1043 Survey Number: AL-V-B-317  
 Project: MD 47 over North Branch, Allegany County Agency: SHA  
 Site visit by MHT Staff: X no     yes Name                      Date                       
 Eligibility recommended            Eligibility not recommended X  
 Criteria:    A    B XC    D Considerations:    A    B    C    D    E    F    G    None  
 Justification for decision: (Use continuation sheet if necessary and attach map)

According to information prepared by SHA, Bridge #1043, a concrete slab structure constructed in 1923, does not meet the National Register criteria. Concrete slab structures such as this bridge were a highly redundant bridge form by the 1930s and Bridge #1043 has no particular historical or engineering significance. Numerous examples of similar bridges remain in the state. Bridge #1043 is not located in any known district.

Documentation on the property/district is presented in: Project Files

Prepared by: Rita Suffness

Elizabeth Hannold February 10, 1992  
 Reviewer, Office of Preservation Services Date

NR program concurrence: X yes     no     not applicable

B. Andrews Feb 92  
 Reviewer, NR program Date

25

Survey No. AL-V-B-317

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA - HISTORIC CONTEXT

I. Geographic Region:

       Eastern Shore (all Eastern Shore counties, and Cecil)  
       Western Shore (Anne Arundel, Calvert, Charles,  
Prince George's and St. Mary's)  
       Piedmont (Baltimore City, Baltimore, Carroll,  
Frederick, Harford, Howard, Montgomery)  
  X   Western Maryland (Allegany, Garrett and Washington)

II. Chronological/Developmental Periods:

       Paleo-Indian 10000-7500 B.C.  
       Early Archaic 7500-6000 B.C.  
       Middle Archaic 6000-4000 B.C.  
       Late Archaic 4000-2000 B.C.  
       Early Woodland 2000-500 B.C.  
       Middle Woodland 500 B.C. - A.D. 900  
       Late Woodland/Archaic A.D. 900-1600  
       Contact and Settlement A.D. 1570-1750  
       Rural Agrarian Intensification A.D. 1680-1815  
       Agricultural-Industrial Transition A.D. 1815-1870  
  X   Industrial/Urban Dominance A.D. 1870-1930  
       Modern Period A.D. 1930-Present  
       Unknown Period (        prehistoric        historic)

III. Prehistoric Period Themes:

       Subsistence  
       Settlement  
       Political  
       Demographic  
       Religion  
       Technology  
       Environmental Adaption

IV. Historic Period Themes:

       Agriculture  
  X   Architecture, Landscape Architecture,  
and Community Planning  
       Economic (Commercial and Industrial)  
       Government/Law  
       Military  
       Religion  
       Social/Educational/Cultural  
       Transportation

V. Resource Type:

Category: Structure

Historic Environment: Rural

Historic Function(s) and Use(s): Transportation

Known Design Source: Unknown

AL-V-B-317

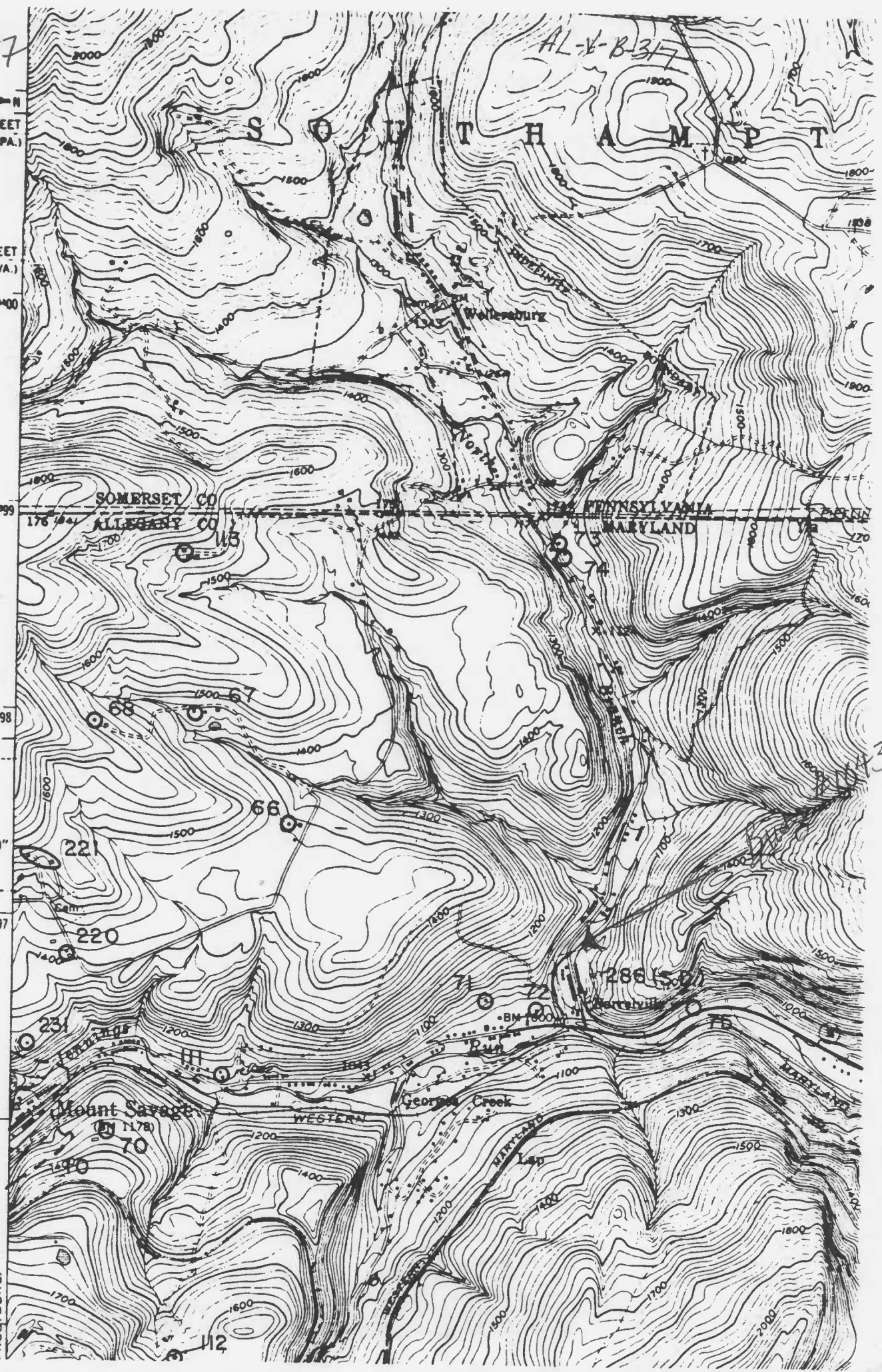
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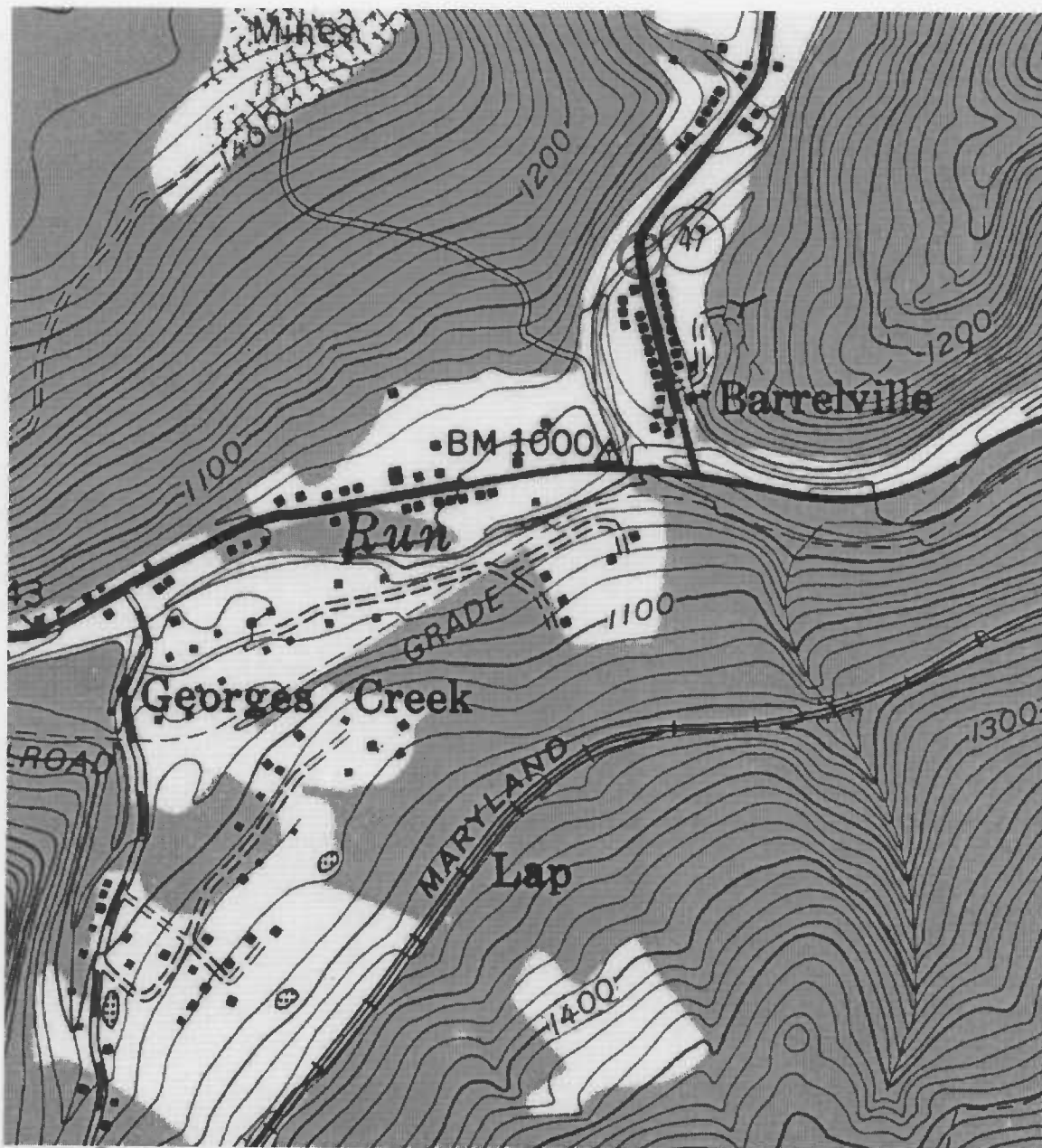
150 000 FEET  
(PA.)

480 000 FEET  
(W. VA.)

42°30"

5263 III NW  
FROSTBURG





AL-V-B-317  
Bridge # 1043  
MD 47 Over North Branch  
Allegany County  
Cumberland Quad